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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 13

Application Number: 09/510,747 Filing Date: February 22, 2000

Appellant(s): LY, HUEY

Douglas L. Weller For Appellant MAILED

FEB 1 0 2004

**EXAMINER'S ANSWER** 

**Technology Center 2100** 

This is in response to the appeal brief filed 05 December 2003.

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# (1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

#### (2) Related Appeals and Interferences

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

#### (3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

#### (5) Summary of Invention

The summary of invention contained in the brief is correct.

#### (6) Issues

The appellant's statement of the issues in the brief is correct.

#### (7) Grouping of Claims

Appellant's brief includes a statement that claims 1-7 and 9-21 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

#### (8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

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## (9) Prior Art of Record

6,125,390 Touboul 9-2000

5,822,543 Dunn et al. 10-1998

6,035,423 Hodges et al. 3-2000

#### (10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-7 and 9-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Touboul** (USPN 6,125,390) in view of **Hodges** et al. (USPN 6,035,423) and in further view of **Dunn** et al. (USPN 5,822,543). This rejection is set forth in prior Office Action, Paper No. 8.

## (11) Response to Argument

Appellant's arguments filed 5 December 2003 have been fully considered but they are not persuasive. Appellant argued: <sup>i)</sup> **Touboul** did not disclose a structure for accomplishing the methods of claims 1-10; <sup>ii)</sup> one would not be motivated to *shift useful functionality to an automated agent in order to decrease burden on the network administration*; and <sup>iii)</sup> the combination of **Touboul** and **Dunn** would destroy the system of **Touboul**.

First, Appellant argues, in relation to claim 11, **Touboul** did not disclose structure for carrying out the methods of claims 1-10 (see Brief, pages 14-16). Specifically, appellant asserts the prior art did not show the structures of an "integrity sensor" and a "main engine" for performing the functionality described in claims 1-10. Appellant,

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further, states the methods of claims 1-10 may be implemented with a wide variety of structures (Brief, page 16, lines 8-12). As an initial matter, the functionality of monitoring integrity is disclosed by **Touboul** as stated in rejection 4 (column 2, lines 38-54; column 8, lines 44-52; and column 9, lines 14-45). Specifically, note column 9, table 3, element T21. This trigger indicates the agent is aware of and performing on a failed program. Further, note column 9, line 45 to column 10, line 4. Here triggers are discussed for fixing or enhancing programs which are not functioning efficiently or correctly, or in other words repairing programs. Apparently, Appellant agrees, the functionality of claims 1-10 was disclosed by Touboul, as Appellant has failed to make a substantial argument otherwise, other than the previously mentioned integrity argument. Appellant only contests structure to perform the functionality. Appellant is incorrect and has ignored the actual disclosure of the cited prior art. Touboul's title reads, "Method and Apparatus for Monitoring and Controlling in a Network" (emphasis added). Further, the cited art states "agent means" and "monitor means" (Touboul: column 2, lines 38-47). Additionally, the prior art states the present invention is implemented using software modules executable by a computer (Touboul: column 6, lines 3-6; column 6, lines 36-39). Structure clearly exists for implementing the functionality of an integrity sensor (mapped to **Touboul** in relation to claim 4) and a main engine (mapped to Touboul in relation to claim 1). The software embodied on a computer, provides structure for implementing the method described in the above claims 4 and 1. The use of broad phrases like "integrity sensor" and "main engine" only provide labels to structures, which must exist to implement the successfully

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demonstrated functionality. Appellant failed to provide any additional limitations, which would indicate the structure does not read on that which is shown in **Touboul**. It is unreasonable to argue that (for example) "integrity sensor" would (under broadest reasonable interpretation) not read upon "the module or segment of code which implements an integrity functionality".

Second, Appellant argues, in relation to claim 1, one would not be motivated to shift useful functionality to an automated agent in order to decrease burden on the network administration (first appears Brief, page 8, last paragraph). Appellant further asserted this knowledge is only obtainable from Appellant's own disclosure. Appellant is incorrect. To state the above motivation in another way, one would be motivated to outsource a function or task from a central site to a remote/assisting site in order to delegate operations or more evenly distribute operations. Appellant is most certainly not the first to realize the potential for delegating operations. This is and was common practice of all large corporations. This is and was also known in the field of research (an researcher may have research assistants). Most importantly though, this was known in computer software. First, this is clearly shown in Touboul itself. Touboul disclosed helping a network administrator (column 1, lines 34-36; column 4, lines 11-14) and rational for wanting to do so (column 1, lines 16-33; aiding an administrator in increasingly complex networks). Furthermore, this system is automatic (column 1, lines 14-15; column 5, lines 3-7). **Touboul** disclosed using agents for these purposes (Abstract; column 5, lines 29-42; column 6, lines 57-61). Furthermore, this basic



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motivation is supported by the definitions of agent as an entity performing work for a management entity. **Wang**'s, <u>Telecommunication Network Management</u>, page 26, defines agent as:

A management agent is a management entity that is responsible for a particular network element being managed. Its responsibilities include executing the management instructions sent from the manager and reporting to the manager any abnormal conditions that occurred at the network element. Both the manager and the agents are also referred to as network management entities that can initiate and implement management actions.

#### Microsoft Computer Dictionary Third Edition, page 19, states an agent as:

**Agent** *n.* 1. A program that performs a background task for a user and reports to the user when the task is done or some expected event has taken place.

#### Dictionary of Computing, page 11, defines an agent as:

**Agent** An autonomous system that receives information from its environment, processes it, and performs actions on the environment on that environment. Agents may have different degrees of intelligence or rationality, and may be software, hardware, or both.

Software agents operate in symbolic environments, and perceive and act upon strings of symbols; examples include personal assistant agents that enhance and customize facilities for computer users, and \*data mining agents that search for interesting patterns in large databases. In a \*distributed system, the agent for a \*remote procedure call is in a different computer from the caller; its environment is the network and the procedure body. A robot (see robotics) is an example of an agent that perceives its physical environment through sensors and acts through effectors.

As can be seen from the cited definitions, the use of the term agent is a management unit offloading work onto to a helper unit (the agent). Particularly, **Microsoft** defines the agent as performing *background tasks* or in other words work with which the user doesn't wish to be bothered. Finally, Appellant's own background section of the specification indicates the previously known method of installing applications (agents

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are applications) locally in order to reduce the burden on a network bandwidth (Specification, page 1, lines 10-19). Therefore, given **Touboul**, the definitions of agent, and Appellant's own admissions of common knowledge it is clear that one of ordinary skill in the art would be motivated to use agents (as intended by their very nature), which is to place functionality within an agent in order to reduce the burden on the central site. Furthermore, to argue otherwise is contrary to the definition of an agent and to do so would produce the illogical conclusion that Appellant's invention is not just an agent of the above functionality, but all agents in general. Finally, Appellant has in two instances (Brief, page 15, top and 17, top) questioned making updates to applications when new versions are available. However, Appellant has provided no reason (other than the above assertion against the motivation) to believe that the cited prior (see claim 1 rejection) art fails to disclose the claimed invention and thus it is believed the cited prior art is sufficiently read upon by the claimed invention (see also, Hodges: column 4, lines 45-59, for updating software from a central cite when updates are necessary).

Third, Appellant alleges, in relation to claim 1, the combination of **Touboul** and **Dunn** would destroy the system of **Touboul** (first appears Brief, page 9, second to last paragraph). This, again, is untrue and demonstrates Appellant's disregard for the cited prior art as a whole. First, the mere objective of providing "self-discovery of agents" has absolutely no bearing on providing a system, which *can install agents*. The two are not opposites as Appellant apparently contends. A system can exist, which can both

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discover existing agents on remote computers and install new agents on the same computers or even other computers. In other words, the two concepts are not exclusive of each other (even though an either or case is acceptable as well). Furthermore, Touboul actually provides a system of both as described above. Touboul demonstrates installing agents (Figure 6, element 106; and column 16, lines 1-65). The addition of Dunn further illuminates that which can substantially be implemented with Touboul alone. Such a combination couldn't possibly destroy Touboul.

In response to appellant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning and impermissible use of claims as a frame, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In conclusion, a proper *prima facie* case of obviousness for all claims has been established. The above arguments apply to additional related claims 11-21 as set forth in the previous office action's rejection. Additionally, Appellant's arguments are simply incorrect when applied against the cited prior art as a whole and fail to show the

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broadest reasonable interpretation of the claimed invention does not read upon the cited prior art. For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

William H. Wood February 5, 2004

Conferees
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John Chavis

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